

## Human Resources and Skills Development Canada Accessibility Centre of Excellence Software Accessibility Checklist

### General Information

Software :	R	Version :	64bit 3.2.2
Date Tested :	October 13, 2015	Is For SCB :	Yes
Tested By :		Ticket # :	5442595
Request details:	Tested R as requested by client		

### Preamble:

This document does not represent an approval or failure of any evaluated software. This document is relative only to the version evaluated and does not reflect any possible improvements in either previous or future versions of the software. Refer to Appendix B for the history and background of this Accessibility Checklist.

### How is software evaluated?

The software is evaluated primarily using the keyboard. No adaptive technologies are used in this phase of testing. Some sections have specific techniques to evaluate them. For more information on how a section is evaluated, please contact the Accessibility Centre of Excellence.

### What is the scope of the evaluation?

The scope of the evaluation is limited to the characteristics exhibited by the software under normal conditions. Not every dialog or function within the software will be evaluated.

### What does the status column mean?

The table below lists all the possible statuses and their meaning relative to the item being evaluated.

Status	Definition
Yes	Item is met completely
Partial	Item is met most of the time
No	Item is not met
Not Applicable (N/A)	Item does not apply / not present
Out of Scope (OoS)	Item should be evaluated independently
Not Tested (N/T)	Item does not need evaluating

### What can be found in Appendix A?

Appendix A contains details on the identified improvement opportunities available in the evaluated software. For every "Partial" and "No" found, included in "Appendix A" is a short description of the identified improvement opportunities that are supported by screen shots.

### Questions?

If you have any questions pertaining to this checklist, please contact the Accessibility Centre of Excellence.

## Results:

Summary of findings and Recommendations :	The software cannot be considered fully accessible via the keyboard.
ACE SCB Statement, if applicable :	ACE cannot recommend this software for use with adaptive computer technologies. ACE will approve this request as an IT Standard on the condition the vendor is provided with a copy of this report and the sponsor commits to update the product to a more accessible version as soon as one becomes available.

**Base Platform:**

Operating System (O/S) :	Windows 7 Enterprise
Office Suite :	2010
E-mail Client :	
Network O/S :	Active Directory
RAM :	4.0 Gb
Hard Drive (Total / Available) :	111/232
Video Card, Driver and Version :	Intel HD Graphics
Display Settings, Refresh Frequency :	1920 x 1080
CPU Type and Speed :	Intel i5 CPU 650 @ 3.20 GHz
Sound Card, Driver and Version :	Realtek High Definition Audio
Computer Brand :	CIARA
Other :	

**K Category – Keyboard**

#	Question	Status
1.	Are there keyboard equivalents available for all functions of the software?	Yes
2.	Are there keyboard shortcuts available for all major functions of the software?	Yes
3.	Is the Tab-Order in a logical left to right, top to bottom order?	N/A
4.	Can all the controls be reached with the Tab key or other navigation keys without using any other input device (Ex: F6 for task panes)?	Yes
5.	Is there a well-defined visual focus indicator and insertion point that moves with standard keyboard navigation controls?	Yes
6.	Is there a keyboard navigation indicator (“_” - underlined access key) for every menu item and every command control?	Yes
7.	Is there a menu equivalent for every function found in all toolbars and format bars?	Yes
8.	Does the software use the standard O/S shortcut keys for common functions (Ex: Control + S for Save)?	No
9.	Does the software use the same shortcut keys throughout the software for the same functions?	N/A
10.	Are shortcut keys and keyboard navigation indicators unique throughout a dialog?	Yes
11.	Is the software fully accessible using only the keyboard?	No

**CO Category – Colours**

#	Question	Status
1.	Does the software use colour as an enhancement, as the only way to convey information or indicate an action?	No
2.	Does the software inherit the O/S colour scheme?	Yes
3.	When colour customizations are available in the software, does the software allow the use of all possible colours (Ex: 32 bit colours)?	Partial
4.	When non-standard O/S colour schemes are used, including enhancements, does the software allow for the customization of these colours?	No
5.	When non-scheme related colours are used, does the software allow for the customization of these colours?	No
6.	Does the software use provide sufficient contrast as defined by the W3C? <sup>1</sup>	Yes

<sup>1</sup> G18: Ensuring that a contrast ratio of at least 4.5:1 exists between text (and images of text) and background behind the text  
<http://www.w3.org/TR/2012/NOTE-WCAG20-TECHS-20120103/G18>

**CT Category – Controls**

#	Question	Status
1.	Does the software allow for the disabling of flashing, rotating or moving elements?	Yes
2.	Are the controls used for their intended purpose?	Yes
3.	Does the software avoid the use of compound controls?	N/A
4.	When important and non-modifiable information appears in input controls, are the controls locked instead of being disabled?	N/A
5.	Are Large Blocks of Text <sup>2</sup> locked or read-only textboxes instead of labels?	N/A

**CG Category – Cognitive**

#	Question	Status
1.	Does the software avoid the use of acronyms that are not defined elsewhere?	Yes
2.	When a button or menu item opens a dialog, does the dialog title refer to the button or menu item name?	No
3.	Are all software dialogs and error messages presented only in the language chosen by the user?	N/A

**OE Category – Outputs and Error Messages**

#	Question	Status
1.	Are the generated documents accessible (i.e. Word or HTML)?	No
2.	Can the documents be generated in more than one format?	Yes
3.	Does the software allow error and/or informational messages to be displayed in a message box?	No
4.	When a message box is displayed, does the application use the appropriate system icons for message box type?	N/A

<sup>2</sup> Large Blocks of Text: Generally defined as paragraphs inside of a control. These controls need to be keyboard accessible.

**ST Category – Screen Texts**

#	Question	Status
1.	Do all toolbar icons have associated text or the ability to add associated text?	Yes
2.	Can all toolbar icons be converted into text only icons?	Yes
3.	Does every dialog, object and control have a clearly named label or caption?	No
4.	Does every field have a label on the left or above the field and contain a colon (:) at the end of the label?	No
5.	Do all toolbar controls have contextual help or ToolTips?	Yes
6.	Does each dialog have a unique and significant title?	Yes
7.	Is each label and caption unique throughout a dialog?	Yes
8.	Does the software inherit the system's font settings?	Yes

**I Category – Icons, Images and Cursors**

#	Question	Status
1.	Does the software use the standard O/S icons for common functions (Ex: The diskette icon for Save)?	Yes
2.	Does the software use the same icons throughout the software for the same functions?	Yes
3.	Does the software avoid use of patterned backgrounds?	Yes
4.	When images can be added, does the software allow a description of the image to be included?	Yes
5.	Do all non-toolbar icons have associated text or the ability to add associated text?	N/A
6.	Can all non-toolbar icons be converted into text only icons?	N/A
7.	Does the software use the O/S defined mouse cursors?	Yes
8.	When non O/S defined mouse cursors are used, does the software allow the cursor to be changed?	Yes
9.	Does the software avoid using non O/S defined mouse cursor as the only way to indicate a status or an action?	Yes

**PE Category – Programmatic Elements (ask developer)**

#	Question	Status
1.	Are all the controls that are used native / derived controls from a native O/S control that is accessible? (i.e. Uses standard controls)	No
2.	Does the software support the O/S programmatic interface for adaptive computer technology?	N/A
3.	Does the software support ShowSounds?	N/A

**AO Category – Accessibility Options**

#	Question	Status
1.	Do the O/S accessibility features continue working when the software is running?	Yes
2.	Do the O/S accessibility features work with the software?	Yes
3.	Does the software support High Contrast mode, including highlighting?	Partial

**MS Category – Multimedia, Sounds and Animations**

#	Question	Status
1.	Does the software have a visual or textual alternative for information that is available in audio format?	N/A
2.	Can the volume be changed or muted?	N/A
3.	Does the software have textual description for video format?	N/A
4.	Does the software allow animations to be disabled?	N/A

**D Category – Documentation**

#	Question	Status
1.	Does the documentation clearly state all keyboard shortcuts that can be used with the software?	Yes
2.	Does the documentation provide clear and precise step-by-step keyboard instructions for all the functions of the program?	Partial
3.	Does the documentation include text to describe images?	N/A
4.	Is all documentation created in an accessible format (i.e.: Installation, help files, manuals, etc.)?	Yes

**T Category – Timing**

#	Question	Status
1.	Does the software provide an option to adjust the response time on timed instructions or allow the instructions to persist?	N/A
2.	Does the software avoid the use of blinking text, objects or other similar elements?	Yes

## Appendix A: List of deficiencies

For every checkpoint that has not fully passed, the failed checkpoint and the reason(s) are listed here. For additional support, sample screenshots that demonstrate the failures are provided.

K.8. Does the software use the standard O/S shortcut keys for common functions (Ex: Control + S for Save)? No. The standard O/S shortcut keys provide a different function in the software, for example: Control + S does not save and Control + P does not print.

K.11. Is the software fully accessible using only the keyboard? No. the software is not fully accessible using only the keyboard. Does not use standard O/S shortcut keys also there are not keyboard equivalents for all functions, for example, Ctrl+A is Select All in Windows.

CO.3. When colour customizations are available in the software, does the software allow the use of all possible colours (Ex: 32 bit colours)? Partial. Colour customizations are available but ONLY from a list of predefined selection.

CO.4. When non-standard O/S colour schemes are used, including enhancements, does the software allow for the customization of these colours? No. Software does not allow you to customize colour schemes.

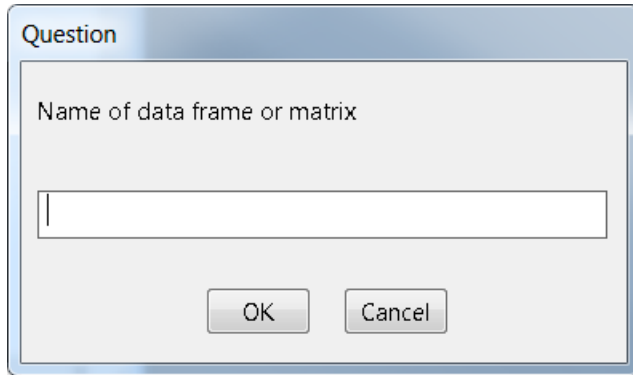
CO.5. When non-scheme related colours are used, does the software allow for the customization of these colours? No. Software does not allow you to customize colour.

CG.2. When a button or menu item opens a dialog, does the dialog title refer to the button or menu item name? No. All dialog titles do not refer to the button or menu item name. The 'Save Workspace' function opens the 'Save image in' dialog box.

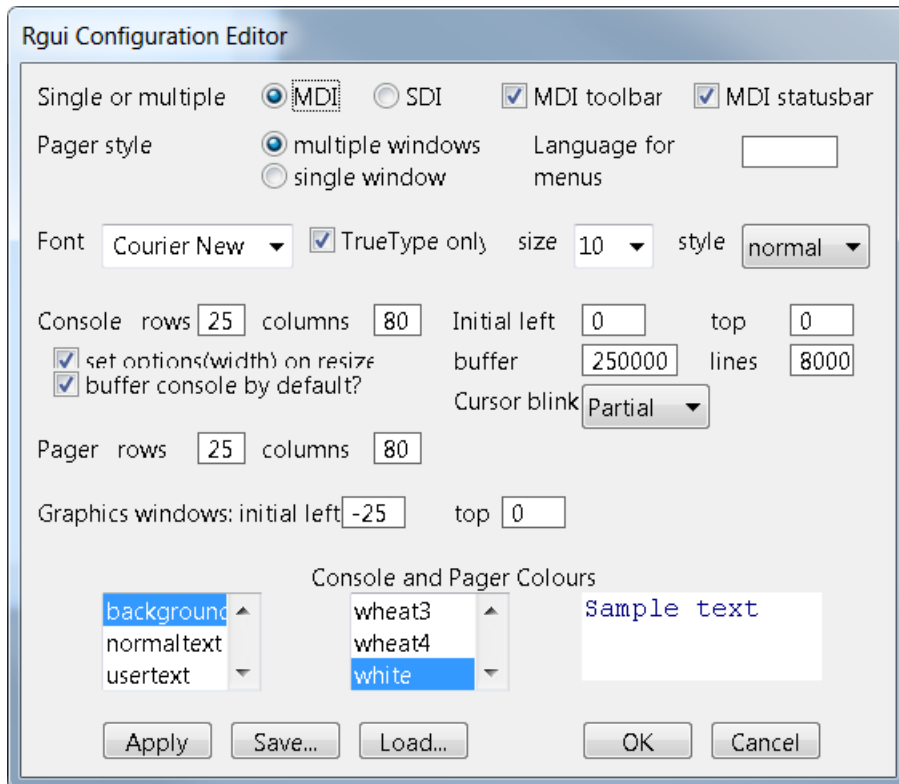
OE.1. Are the generated documents accessible (i.e. Word or HTML)? No, the generated documents such as charts and graphs because only an image is provided with no data for a blind person to 'read'.

OE.3. Does the software allow error and/or informational messages to be displayed in a message box? No. Error and informational messages do not appear in a message box, they appear in the console window

ST.3. Does every dialog, object and control have a clearly named label or caption? No. Not every dialog, object and control have a clearly named label or caption, for example, when I select Data Editor, I get a dialog box entitled 'question' (see below)



ST.4. Does every field have a label on the left or above the field and contain a colon (:) at the end of the label? No, for example below the 'RGUI Configuration Editor' none of the field label contain a ':' delimiter.



PE.1. Are all the controls that are used native / derived controls from a native O/S control that is accessible? (i.e. Uses standard controls). No. The software does not use standard controls. **ASK DEVELOPER**



## **Appendix B: References and Background**

The Desktop software evaluation checklist has evolved over time. Several items in the checklist have been developed as a result of direct experience in resolving User/Client difficulties in the workplace. All items are specific to software characteristics and are technology agnostic; that is, they are not dependant upon a specific programming language or development environment.

The checklist has its roots in “Section 508” of the United States Rehabilitation Act. Particularly, Electronic and Information Technology Accessibility Standards (Section 508) Subpart B: [http://www.access-board.gov/sec508/standards.htm#Subpart\\_b](http://www.access-board.gov/sec508/standards.htm#Subpart_b) Additionally, some guidance has been gained from the IBM Software Accessibility Checklist - Version 3.5.1 <http://www-03.ibm.com/able/guidelines/software/accesssoftware.html> as well as the Microsoft Accessibility Developer Center <http://msdn2.microsoft.com/en-us/accessibility/default.aspx> and Microsoft Windows XP Logo Program Requirements, Section 3.0